



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/563,968

06/28/2007

Adnan Gabela

20459-00398-US1

7345

30678

7590

05/12/2009

CONNOLLY BOVE LODGE & HUTZ LLP

1875 EYE STREET, N.W.

SUITE 1100

WASHINGTON, DC 20006

EXAMINER

BEACH, THOMAS A

ART UNIT

PAPER NUMBER

3671

MAIL DATE

DELIVERY MODE

05/12/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/563,968	Applicant(s) GABELA ET AL.	
	Examiner THOMAS A. BEACH	Art Unit 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The use of "and/or" renders the claims vague and indefinite as to what the meets and bounds of the claim are constituted by since it is not clear whether one or both elements are being claimed.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-19 and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Krekeler 4,275,929. Krekeler shows a tooth system (fig 4) intended for a tool of an earth moving machine, which tooth system is of the type comprising a holder (18) attached to the tool and a front tooth portion (1), which is detachably arranged in relation to and on the holder (18) and is in the form of an exchangeable wear and/or replacement part intended for the actual earth moving, which tooth portion comprises a rear leg (12) and the holder (18) comprises a cavity designed to receive the leg (15) during interaction with the tooth portion and, thus, achieve a common joint for the absorption of arising forces through a predetermined connection geometry comprising

Art Unit: 3671

special, opposed, mutually interacting contact surfaces and, at least initially, clearance surfaces that are arranged along the tooth portion (1) and holder (18), wherein the tooth leg and cavity, along at least a front part of said joint have a multi-armed, cruciform, cross section (fig 1) comprising projection arms and grooves each interacting with a projection arm (15) and wherein a tensioning device (25) is arranged at the cavity's rear part for achieving a tightening and adjustable pretensioning of the tooth portion in relation to the holder (18) essentially axially along the cavity's longitudinal symmetry axis Y (fig 1-2).

As concerns claim 2, Krekeler shows the projection arms comprise at least one essentially vertically arranged arm (15) or heel (15) and two, theretoward essentially lateral, wing portions (fig 1)

As concerns claim 3, Krekeler shows the projection arms comprise an, essentially vertically arranged, upper arm, essentially vertically arranged, lower heel and two, essentially horizontally lateral wing portions (fig 1).

As concerns claim 4, Krekeler shows the tooth leg (12/15) has a rearwards convergent cross section (fig 1 & 2).

As concerns claim 5, Krekeler shows the cavity is designed as a notch (fig 1 & 2) inwardly convergent of the holder (18).

As concerns claim 6, Krekeler shows the cavity is open rearwards and upwards such that an open notch runs along the top side of the holder (fig 1-4).

As concerns claim 7, Krekeler shows the cavity's rear part is comprised of lengthwise side walls and a bottom that is essentially perpendicularly arranged to each

Art Unit: 3671

other with the cavity open upwards and to the rear, so that the cross section of this part is essentially U-shaped (fig 2).

As concerns claim 8, Krekeler shows a cross section within a middle part of the cavity (19) comprises a truncated, lower triangular part with essentially rounded comers, where the blunt, lower side forms the cavity's bottom and where the cross section's lower comers preferably comprise lengthwise clearance surfaces, while the cross section's upward continuation is primarily formed by inwardly angled lengthwise sides intended to form interacting contact zones together with the tooth leg's side surfaces and thereafter by lengthwise, essentially vertical, side walls at a certain distance from one another forming an upwardly open, upper notch neck (fig 1-2).

As concerns claim 9, Krekeler shows the grooves within a front part (fig 1-2) of the cavity each comprise an outwardly dilating of the notch cross section from within the cavity and forward in relation to the axial symmetry axis Y.

As concerns claim 10, Krekeler shows a middle part of the cavity (19) has a play arranged in part between the tooth leg's (12/15) lower sides and the cavity's (19) lengthwise sides (fig 1 &-2) at the cavity's bottom and in part between the tooth portion's spine part's sides and the cavity's lengthwise upper sides and between the tooth leg underside and the cavity's bottom.

As concerns claim 11, Krekeler shows the tooth portion (fig 4) comprises a spine part protruding through the open notch (fig 1 & 2).

As concerns claim 12, Krekeler shows secondary material reinforcement is arranged at the tooth portion's (fig 4) spine part

Art Unit: 3671

As concerns claim 13, Krekeler shows wherein along a rear part ~ of the joint between the connection parts are contact surfaces (fig 1-4) arranged in an acutely pointed angle that appears to be less than 10° with respect to the lengthwise symmetry axis Y or parallel thereto to the lengthwise symmetry axis Y.

As concerns claim 14, Krekeler shows the tooth portion or the holder comprises a protruding torque heel and that the opposed connection part comprises a corresponding depression, interacting with the heel (-34-) to absorb the laterally impacting transverse forces, which impact perpendicular to the axial symmetry axis Y.

15. (Currently amended) Tooth A tooth system (--1-) in accordance with claim 1, wherein the projection arms are comprised by one, essentially somewhat forwardly inclined and upward symmetrically arranged, tooth point (--34-), and the two, essentially horizontal, lateral wing portions symmetrical on either side of the tooth point (-34-) and an essentially downward vertically designed heel (--34-).

As concerns claim 16, Krekeler shows after the assembly of the holder (fig 4) and the tooth portion, an impact zone at the beginning of the joint between them forms a common stop zone, whose stop surfaces comprise the front side of the holder and the opposed back side of the tooth portion, where the greater part of the tooth portion's surfaces that is in contact with the front side of the holder, are situated on the same side as the holder of an imagined vertical plan positioned directly in front of the forwardmost parts of the holder.

As concerns claims 17-18, Krekeler shows contact zones for winch force absorption, as well as the torques resultant therefrom, are arranged along lower contact

Art Unit: 3671

surfaces at the tooth portion's (-5-) two lateral wing portions and upper contact surfaces at the top side of the tooth leg (12/15).

As concerns claim 19, Krekeler shows contact zones for shearing force f_f , ~ absorption, as well as that of torques resultant therefrom, are arranged along upper contact surfaces at the tooth portion's (fig 1-4) two lateral wing portions and lower contact surfaces at the lower side of the tooth leg.

As concerns claims 23-24, Krekeler shows the tooth system comprises a removable insert, suitably of hard metal, at the rear part of the joint within the cavity, which insert absorbs surface forces between the interacting connection parts and the earth moving machine, the tool and the wear and/or replacement parts for the removal and breaking of masses from a working surface, are especially exemplified by a dredger cutter's bore bit with its replaceable wear teeth (fig 4).

Allowable Subject Matter

4. Claims 20-22 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 3671

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Beach whose telephone number is 571.272.6988. The examiner can normally be reached on Monday-Friday, 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will can be reached on 571.272.6998. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas A. Beach

/Thomas A Beach/
Primary Examiner, Art Unit 3671

May 12, 2009

THOMAS A. BEACH
Primary Examiner
Group 3600